

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A system, ~~for enabling components to transfer data between each other, the system~~ comprising:

a processor;

a memory;

a first component comprising a data object;

a universal data transfer interface comprising object-oriented mobile code, wherein the object-oriented mobile code ~~which~~ is transmitted between a plurality of components and ~~executed~~ instructions of ~~[[on]]~~ the first component to facilitate file access and printing to the plurality of components prior to initiation of ~~initiating~~ a data transfer,

wherein the data object controls the universal data transfer interface,

wherein, in response to execution, the instructions return a data type supported by the first component, and a device type and an operating status of the first component, thereby facilitating the first component to negotiate with a second component to select a transfer medium for transfer of data ~~transferring of the data transfer~~ between the first and second components based on the data type, wherein the data type is independent of an operating system domain and at least one peripheral domain[[.]]; and

an intermediary component configured to invoke the universal data transfer interface to request ~~for~~ and receive a data transfer session object (DTSO) and to transfer the DTSO to the second component, wherein the DTSO includes source-specific object-oriented mobile code that is interpreted and executed by the second component, ~~[[and]]~~

wherein the DTSO is invoked by the second component to transfer the data between the first component and the second component.

2. (Cancelled)

3. (Currently amended) The system as set forth in claim 1₁ wherein the second component sends a second DTSO to the first component to be used by the first component for ~~receiving~~ to receive the data ~~transmitted from the third component.~~

4. (Currently amended) The system as set forth in claim 1₁ wherein the second component receives the DTSO from the first component ~~to be used by the third component for receiving~~ to receive the data transmitted from the first component.

5. (Cancelled)

6. (Cancelled)

7. (Currently amended) The system as set forth in claim 1₁ wherein the DTSO is configured to indicate completion responsive to expiration of a data transfer lease by the first component or by the second component, or responsive to an indication of the first component or to the second component ~~indicating~~ that the data transfer has completed or failed.

8. (Currently amended) A system, ~~for enabling components to transfer data between each other, the system~~ comprising:

a processor;

a memory;

a first component comprising a first data object;

a second component comprising a second data object;

a first universal data transfer interface comprising object-oriented mobile code, wherein the object-oriented mobile code which is transmitted between a plurality of components and executed instructions of [(on)] the first component to facilitate file access and printing to the plurality of components, wherein the first data object controls the first universal data transfer interface, and wherein the first universal transfer interface is independent of an operating system type and at least one peripheral type.

wherein the instructions return a data type supported by the first component, and a device type and an operating status of the first component, thereby facilitating the first component to negotiate with another component to select a transfer medium for transfer of transferring data based on the data type;

a second universal data transfer interface, wherein the second data object controls the second universal data transfer interface; and

an intermediary component configured to invoke the first universal data transfer interface and the second universal data transfer interface to request ~~for~~ and receive a data transfer session object (DTSO) and to transfer the data between the first component and the second component;

wherein the DTSO includes source-specific object-oriented mobile code that is interpreted and executed by the first component or the second ~~third~~ component.

9. (Currently amended) The system as set forth in claim 8, wherein the intermediary component sends the DTSO to the first component to be used by the first component ~~for receiving to receive the~~ data transmitted from the second component.

10. (Currently amended) The system as set forth in claim 8, wherein the intermediary component sends the DTSO to the second component to be used by the second component ~~for receiving to receive the~~ data transmitted from the first component.

11. (Currently amended) The system as set forth in claim 8, wherein the DTSO is configured to indicate completion responsive to expiration of a data transfer lease by the first component or the second component, or responsive to an indication of the first component or the second component ~~indicating~~ that the data transfer has completed or failed.

12. (Currently amended) A method, ~~for enabling a plurality of components to transfer data between each other, the method~~ comprising:

invoking, with an intermediary component comprising a data object that implements a universal data transfer interface, ~~the universal data transfer interface of a first component to request for and receive~~ wherein the universal data transfer interface enables requesting and receiving of a data transfer session object (DTSO) and ~~to transfer~~ transferring of the DTSO to the intermediary component, and wherein the universal data transfer interface comprises object-oriented mobile code, and

invoking the DTSO with a second component to transfer data between the first component and ~~[[the]]~~ a second component,

~~transmitting the object-oriented mobile code wherein the universal data transfer interface comprising object-oriented mobile code, which is transmitted~~ between a plurality of components and ~~executed~~ instructions of ~~[[on]]~~ the first component, ~~to facilitate~~ thereby facilitating file accessing and printing to the plurality of components prior to initiating a data transfer;

~~receiving wherein the instructions return~~ a data type supported by the first component, and a device type and an operating status of the first component, thereby facilitating negotiating by the first component ~~to negotiate~~ with ~~[[a]]~~ the second component ~~[[to select]]~~ in selecting a transfer medium for transferring the data between the first and second components based on the data type, wherein the instructions are independent of an operating system identification and at least one peripheral identification; and

~~executing wherein the DTSO includes~~ source-specific object-oriented mobile code of the DTSO ~~that is interpreted and executed~~ by the second component.

13. (Cancelled)

14. (Currently amended) The method as set forth in claim 12, further comprising sending a second DTSO to the first component to be used by the first component for receiving the data transmitted from the intermediary component.

15. (Currently amended) The method as set forth in claim 12, further comprising receiving the DTSO from the first component to be used by the intermediary component for receiving the data transmitted from the first component.

16. (Cancelled)

17. (Cancelled)

18. (Currently amended) The method as set forth in claim 12, further comprising ~~configuring the DTSO to indicate~~ indicating completion ~~by the DTSO~~ responsive to expiring ~~expiration~~ of a data transfer lease by the first component or ~~by the third component, or responsive to the first component or to the third component~~ indicating that the data transfer has completed or failed.

19. (Currently amended) A method, ~~for enabling components to transfer data between each other, the method~~ comprising:

invoking a first universal data transfer interface of a first data object belonging to a first component and invoking a second universal data transfer interface of a second data object belonging to a second component ~~when the first component has data to transfer to the second component;~~

~~wherein~~ intermediating by the second component ~~acts as an intermediary component, which facilitates to facilitate~~ transferring of the DTSO from the first component to a third component;

obtaining a data transfer session object (DTSO) from one of the ~~invoked~~ first universal data transfer interface or the second universal data transfer interface; ~~and~~

employing using the DTSO to transfer data between the first component and the second component;

wherein the universal data transfer interface includes ~~comprising~~ object oriented mobile code, ~~which is transmitted enabling transmitting~~ between a plurality of components and ~~executed executing~~ instructions ~~on the component~~ to facilitate file accessing and printing to the plurality of components prior to initiating a data transfer;

~~wherein the instructions return~~ returning a data type supported by the first component, and a device type and an operating status of the first component, thereby facilitating ~~the first component to negotiate~~ negotiating with the second component ~~to select~~ including selecting a transfer medium for transferring data between the first and second components based on the data type, wherein the data type and the device type are independent of an operating system domain and at least one peripheral domain; and

~~wherein the DTSO includes~~ employing source-specific object-oriented mobile code within the DTSO that is interpreted and executed by the second component.

20. (Currently amended) The method as set forth in claim 19, further comprising sending the DTSO to the first component to be used by the first component for receiving the data transmitted from the second component.

21. (Currently amended) The method as set forth in claim 19, further comprising sending the DTSO to the second component to be used by the second component for receiving the data transmitted from the first component.

22. (Currently amended) The method as set forth in claim 19, further comprising configuring the DTSO to indicate completion responsive to expiring expiration of a data transfer lease by the first component or by the third component, or responsive to the first component or to the third component indicating that the data transfer has completed or failed.

23. (Currently amended) A non-transitory computer readable storage medium having stored thereon computer-executable instructions for enabling components to transfer data between each other, which, when in response to execution executed by a computing system one or more processors, causes cause the processors computing system to perform operations comprising:

invoking-with an intermediary component comprising a data object that implements a universal data transfer interface via an intermediary component-the universal data transfer interface of a first component to request and requesting for and receiving receive a data transfer session object (DTSO) and to transfer the DTSO to the intermediary component, and

invoking the DTSO via with a second component to transfer data between the first component and the second component,

wherein the universal data transfer interface includes comprising object-oriented mobile code, which is transmitted to enable transmission of information between a plurality of components and execution of executed instructions on the component to facilitate file access and printing to the plurality of components prior to initiating a data transfer;

wherein the instructions return returning a data type supported by the first component, and a device type and an operating status of the first component, thereby-and facilitating the first component to negotiate with a second component to selecting a transfer medium for transferring data between the first and second components based on the data type, wherein the instructions are independent of an operating system type and at least one peripheral type; and

wherein the DTSO includes employing source-specific object-oriented mobile code within the DTSO that is interpreted and executed by the second component.

24. (Cancelled)

25. (Currently amended) The non-transitory computer readable storage medium as set forth in claim 23, the operations further comprising sending a second DTSO to the first component to be used by the first component for receiving the data transmitted from the intermediary component.

26. (Currently amended) The non-transitory computer readable storage medium as set forth in claim 23, the operations further comprising receiving the DTSO from the first component to be used by the intermediary component for receiving the data transmitted from the first component.

27. (Cancelled)

28. (Cancelled)

29. (Currently Amended) The non-transitory computer readable storage medium as set forth in claim 23, the operations further comprising ~~configuring the DTSO to indicate~~ indicating completion ~~by the DTSO~~ responsive to ~~expiration~~ expiring of a data transfer lease by the first component ~~or by the third component, or responsive to the first component or to the third component~~ indicating that the data transfer has completed or failed.

30. (Currently amended) A non-transitory computer readable storage medium having stored thereon instructions ~~for enabling components to transfer data between each other, which when executed which, in response to execution~~ by one or more computing devices ~~processors~~, ~~causes cause~~ the one or more computing devices ~~processors~~ to perform operations comprising:

invoking a first universal data transfer interface of a first data object belonging to a first component and invoking a second universal data transfer interface of a second data object belonging to a second component ~~when in response to~~ the first component has having data to transfer to the second component, wherein the second component ~~acts as~~ is an intermediary component, ~~which that~~ facilitates transferring of the DTSO from the first component to a third component;

obtaining a data transfer session object (DTSO) from one of the ~~invoked~~ first universal data transfer interface or the second universal data transfer interface; and

using the DTSO to transfer data between the first component and the second component;

wherein the one of the first universal data transfer interface or the second universal data transfer interface ~~comprising comprises~~ object oriented mobile code, ~~which is transmitted that enables transmitting~~ between a plurality of components and ~~executed executing instructions on the first component or the second component, respectively, the component~~ to facilitate file access and printing ~~to the plurality of components prior to initiating a data transfer;~~

~~wherein the instructions return~~ returning a data type supported by the first component, and a device type and an operating status of the first component, ~~thereby facilitating the first component to negotiate and negotiating~~ with the second component to enable selecting ~~select~~ a transfer medium for transferring data between the first and second components based on the data type, wherein the instructions are independent of an operating system domain and at least one peripheral domain; and

~~wherein the DTSO includes~~ employing source-specific object-oriented mobile code within the DTSO that is interpreted and executed by the second component.

31. (Currently amended) The non-transitory computer readable storage medium as set forth in claim 30, the instructions further comprising sending the DTSO to the first component to be used by the first component for receiving data transmitted from the second component.

32. (Currently amended) The non-transitory computer readable storage medium as set forth in claim 30, the instructions further comprising sending the DTSO to the second component to be used by the second component for receiving data transmitted from the first component.

33. (Currently amended) The non-transitory computer readable storage medium as set forth in claim 30, the instructions further comprising configuring the DTSO to indicate completion responsive to ~~expiration~~ expiring of a data transfer lease by the first component ~~or by the third component, or responsive to the first component or to the third component~~ indicating that the data transfer has completed or failed.

34. (New) A method, comprising:
interfacing one or more peripherals to at least one computer; and
negotiating data type information that is employed for communications between the one or more peripherals and the at least one computer, wherein the data type information is independent of domain-specific interfaces associated with the at least one computer and independent of peripheral-specific interfaces associated with the one or more peripherals.

35. (New) A device, comprising:
an interface configured to communicate with at least one peripheral device via a data type that is independent of an operating system type or a peripheral type; and
a communications component configured to determine at least one connection data type for a data exchange between the interface and the at least one peripheral device.

36. (New) A system, comprising:
means for interfacing one or more peripherals to at least one computer; and
means for negotiating data type information that is employed for communications between the one or more peripherals and the at least one computer, wherein the data type information is independent of domain-specific interfaces associated with the at least one computer and independent of peripheral-specific interfaces associated with the one or more peripherals.